

WHAT IS CLAIMED IS:

1. A water-swelling composition adapted to be secured to an area of potential water flow in the form of a flexible cohesive mass comprising about 10% to about 90% by weight of a water-swellaible layered material; about 1% to about 20% of an elastomer; about 8% to about 65% by weight of a material selected from the group consisting of polypropene, polybutene, and a mixture thereof; and about 0.1% to about 20% by weight of a clay binder selected from group consisting of (1) an onium ion-liberating compound that is ion-exchanged with the layered material, (2) a coupling agent that is reacted with the layered material, and (3) a combination thereof.

2. The water-swellaible composition of claim 1, wherein the composition includes about 50% to about 90% layered material; about 2% to about 10% elastomer; about 12% to about 20% of a material selected from the group consisting of polypropene, polybutene, and a mixture thereof; and about 0.2% to 10% by weight of the clay binder.

3. The water-swellaible composition of claim 2, wherein the composition comprises about 35% to about 90% by weight layered material and wherein the polypropene, polybutene, or mixtures thereof is included in the composition in an amount of about 10% to about 20% by weight.

4. The water-swellaible composition of claim 1, wherein the layered material is a smectite clay.

5. The water barrier of claim 4, wherein the smectite clay is selected from the group consisting of sodium bentonite, sodium montmorillonite, calcium bentonite, calcium montmorillonite, magnesium bentonite, magnesium montmorillonite, iron bentonite, iron montmorillonite, beidellite, nontronite, hectorite, saponite, sepiolite, and combinations thereof.

6. A method of manufacturing a water barrier in a shape of a rod or rope, having a length to width ratio of at least 10, comprising extruding the clay-containing composition of claim 1 to ion-exchange onium ions with internal layered material platelet cations.

7. The method of claim 6 further including intercalating the polybutene or polypropene between adjacent layered material platelets to exfoliate at least a portion of the layered material into individual platelets.